CLAIMS

WE CLAIM:

1. An integrated circuit fabricated on a single substrate comprising:

a first interface to a page-width inkjet printhead; and

a general-purpose processor operatively connected to said first interface, wherein said processor is operative to run software that controls said first interface.

2. An integrated circuit according to claim 1, wherein said first interface is operative to control the printing of pages in streaming mode.

3. An integrated circuit according to claim 1, wherein said first interface is operative to control the printing of pages in single-page mode when the size of received pages exceeds a memory threshold.

4. An integrated circuit according to claim 3, wherein said memory threshold is 3MB.

5. An integrated circuit according to claim 1, wherein said processor is operative to transfer bi-level color data to said first interface at a constant required rate.

6. An integrated circuit according to claim 1, further comprising:

a Memjet printhead operatively connected to said first interface, said printhead comprising nozzles;

wherein said first interface is operative to load said Memjet printhead with dots to be printed and to control a printing process.

7. An integrated circuit according to claim 6, further comprising:

a plurality of local buffer storage units operatively connected to said first interface;

wherein said first interface comprises:

a line loader/format unit operative to load said dots to be printed into said local buffer storage units and to format said dots into an order required for said Memjet printhead; and

a Memjet second interface operative to transfer data to said Memjet printhead and to control a firing sequence of said nozzles during a print process.

8. An integrated circuit according to claim 7, wherein said line loader/format unit uses a double buffering scheme for preparing said dots for printing wherein one buffer unit is read from while another buffer unit is written to.

9. An integrated circuit according to claim 8, wherein said plurality of local buffer storage units is divided into multiple sub-buffers wherein each sub-buffer is assigned a single color.

10. An integrated circuit according to claim 7, wherein said Memjet second interface is directly connected to said Memjet printhead.